Trauma Care: The “Golden Hour” Meets the “Golden Years”

In Emergency Medicine this month and next, Drs. Tom Scalea (See “The Golden Hourglass,” EM, April 2007), Ashley Menne, Daniel Haase, and Jay Menaker of the University of Maryland’s R Adams Cowley Shock Trauma Center paint a detailed picture of the changing landscape of trauma care over the past two decades.

In his introduction, Dr. Scalea writes “Certainly, the most important change has been the ‘graying’ of trauma patients...[whose evaluation and care] may involve a number of diagnostic tests in the ED...,” and whose care must include dealing with comorbidities, and a large number of medications that might interact with the analgesics, sedatives, and anti-seizure meds needed to treat trauma. These considerations have led many Level I trauma centers to add advanced patient age as an independent determinant for both trauma activations and subsequent ICU admissions, and to include “geriatric” consultants in the initial management.

The aging trauma patient, however, is not the only factor responsible for major changes in the management of serious trauma, as the Shock Trauma group describes the current difficulties in attempting to rapidly reverse the anticoagulation effects of the novel oral anticoagulants (NOACs) that are increasingly being prescribed instead of warfarin to manage the thromboembolic complications of atrial fibrillation, valve replacement, venous thrombosis, and pulmonary embolism in both younger and older patients. They also explain a major change in thinking regarding the optimal degree of blood pressure control in favor of “permissive hypotension” as part of “damage control resuscitation,” and in the amount and types of volume replacement, optimal blood component ratios for transfusion, monitoring, and faster and less invasive endovascular repair techniques for hemostasis. The authors also note the persistent and rising incidence of penetrating trauma from gunshot and knife wounds.

But the increasing percentages of elderly trauma victims requiring care for devastating falls and low-speed vehicular injuries in even the busiest “knife and gun club” trauma centers mandate the attention of all health care providers. In recent months, much space in this and other journals has been devoted to the health care issues of the elderly (see “Recognizing and Managing Elder Abuse in the Emergency Department,” and “Elder Abuse: A New Old Problem,” EM, May 2017) that necessitate significantly increased resources and provider time and effort now, and for at least the first half of the 21st century.

The main reason for this seismic demographic shift, dubbed by some “the silver tsunami”, is the aging post World War II “baby boomer” generation that has commanded center stage in western society throughout their development since the late 1940s. As a member of that generation, I often wonder how subsequent generations such as “Gen X” and “Millennials” view this phenomenon. Do they resent the attention, resources, and expenditures now demanded by baby boomers? If so, there is an important lesson to be learned from the changes in trauma care described in the following pages: virtually every measure now employed to enhance recovery of an elderly trauma victim will benefit younger trauma victims, as well. At most, some of the measures may not be absolutely necessary because younger adults have greater functional reserve and are more likely to survive less precise management, even if their posttraumatic courses are longer and more difficult. But younger trauma victims with comorbidities can also benefit from a more inclusive team approach from the start, as well as measures such as permissive hypotension, vascular stents and less invasive endovascular approaches, more precise blood component replacement, more accurate monitoring, and a better approach to anticoagulation and its reversal.

Faster and better quality survival of all trauma victims—including, but not limited to, the elderly—will free up needed and expensive resources for other patients and trauma victims, including those who continue to butt heads, drive two and four wheel vehicles at excessive speeds, and engage in trauma of an “interpersonal nature.”

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